

4.0 Permit Requirements

D. Management Programs

2. Erosion and Sediment Control

An acceptable erosion and sediment control program shall continue to be maintained and implemented in accordance with the Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland. Activities to be undertaken by Baltimore County shall include, but not be limited to:

- a. Implementing program improvements identified in any MDE evaluation of the County's erosion and sediment control enforcement authority;
- b. At least three times per year, conducting responsible personnel certification classes to educate construction site operators regarding erosion and sediment control compliance;
- c. Program activity shall be recorded on MDE's annual report database and submitted as required in PART V of this permit; and
- d. Reporting quarterly, information regarding earth disturbances exceeding one acre or more. Quarters shall be based on calendar year and submittals shall be made within 30 days following each quarter. The information submitted shall cover permitting activity for the preceding three months.

4.1 Introduction

The Erosion and Sediment Control Program is being implemented by the Department of Permits, Approvals and Inspections (PAI), Building Inspections Division and has been since February 2012 when the program was transferred from EPS's Inspection and Enforcement Section. This program is reviewed by the Maryland Department of the Environment (MDE) on a biennial basis. On January 9, 2012 MDE formally adopted new erosion and sediment control regulations. Additionally, the 1994 Maryland Standards and Specifications Manual for Soil Erosion and Sediment Control has been revised. The 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control document received final approval and was published on January 27, 2012. The new regulations and standards will enhance erosion and sediment control practices, improve water quality of construction site runoff, and help in the Chesapeake Bay restoration efforts. In late March 2012 a letter from the Baltimore County Soil Conservation District was sent to consultants serving Baltimore County regarding the formal adoption of the new erosion and sediment control regulations and the grandfathering conditions consistent with the MDE regulations. Baltimore County adopted this manual in a manner consistent with MDE regulations on November 19, 2012 ([Council Bill Number 72-12](#)). The Erosion and Sediment Control Program contains several components:

- review of building and grading permit applications
- field inspection and enforcement of grading and sediment control regulations
- citizen complaint investigation, and

- training program for certification of responsible personnel.

Baltimore County has been given the authority to enforce sediment control regulations by the State of Maryland. The main function of the Erosion and Sediment Control Program is to reduce pollutant loads from new development and redevelopment during the construction phase. This goal is achieved using sediment control best management practices (BMPs) as specified in the sediment and erosion control plan for each development site. Sediment control plans are required for any construction activity disturbing an area greater than 5,000 square feet. The standard plan for Sediment and Erosion Control is used for residential construction activity disturbing less than 30,000 sq. ft. and for all other construction activity disturbing less than 20,000 sq. ft.

4.2 Program Analysis – Plans Review

Currently, Sediment and Erosion Control Plans are reviewed for adequacy by the Baltimore County Soil Conservation District while EPS's Stormwater Engineering and Management Section coordinates the approval process. The Sediment and Erosion Control Plans are also reviewed by EPS's Environmental Impact Review Section to ensure that there is no encroachment into the forest buffer or forest conservation areas that are protected by County regulations.

Each Sediment and Erosion Control Plan is required to have an associated Grading Plan indicating the final topographic contours of the development site. The Grading Plan is reviewed by EPS, Development Plans Review (PAI) and the Baltimore County Soil Conservation District.

4.3 Program Analysis – Inspection and Enforcement

The Inspection and Enforcement Program maintains records of issued grading permits, conducts routine inspections of active construction sites, and issues correction notices, violation notices, and stop work orders to enforce compliance of sediment and erosion control and grading plans. Prior to the issuance of grading permits, a pre-construction meeting is held at the site. This meeting is attended, at a minimum, by the County inspector and the construction site foreman. The foreman must be certified through the "responsible personnel in erosion and sediment control" training program which is described in section 4.4. The meeting covers the sequence of operations for the installation of controls and grading involved with the overall site development. This meeting is intended to forestall any future problems.

4.3.1 Grading and Building Permits Issued

Grading permits and building permits are reviewed by PAI and EPS. Grading Permits are required for any disturbance over 5,000 square feet or for grade changes in existing neighborhoods. Baltimore County building permits are required for any new construction, additions, or alterations. Building permits are reviewed to ensure that the final drainage patterns will not impact adjacent properties and that the onsite drainage will direct stormwater away from building structures to stormwater management facilities. These permits are also reviewed to ensure that they are in compliance with other environmental regulations, such as, Chesapeake Bay Critical Area, Forest Buffer and Forest Conservation requirements.

During the fiscal year 2015, one hundred sixty (160) grading permits were issued. This represents an increase in the number of grading permits from FY14. The number of acres disturbed rose from 523 acres in FY2014 to 534 acres in FY2015. The number of grading

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permits approved and the acreage of disturbance are displayed by watershed in Table 4-1 and Figure 4-1. The discrepancy in the table total acres disturbed is due to a pipeline project where 100 acres were disturbed in multiple locations so precise location information was not available. Most of the grading activity in Baltimore County has shifted to suburban watersheds with existing older communities, and with much of the activity associated with commercial uses.

Table 4.1: Number of Grading Permits and Acreage of Disturbance by Watershed for FY2015.

Watershed	Number of Permits	Acreage of Disturbance
Upper Western Shore		
Deer Creek	0	0.0
Prettyboy Reservoir	0	0.0
Loch Raven Reservoir	21	70.20
Lower Gunpowder Falls	10	25.22
Little Gunpowder Falls	3	14.16
Bird River	13	78.08
Gunpowder River	1	1.77
Middle River	10	25.83
UWS Totals	58	215.26
Patapsco/Back River		
Liberty Reservoir	3	3.17
Patapsco River	15	61.09
Gwynns Falls	28	94.76
Jones Falls	33	36.75
Back River	21	14.3
Baltimore Harbor	4	8.45
Patapsco/Back R. Totals	104	218.52
County Totals	162	433.78

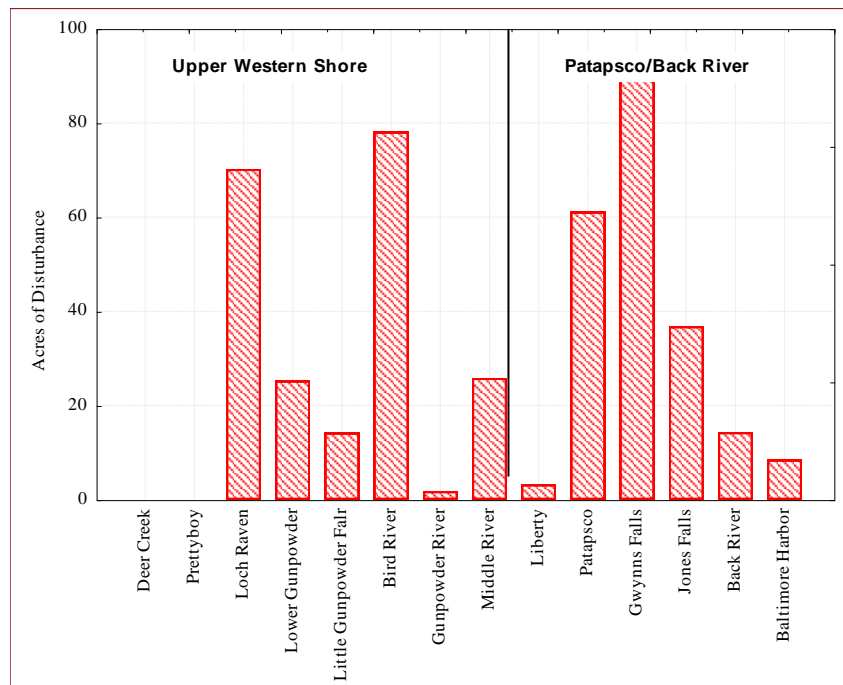


Figure 4-1: Acres of Disturbance through approved grading permits by watershed for FY2015.

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During the FY2015, 1,589 permits were released for new buildings. This represents an increase from the previous year by 465 and the most since 2002. The distribution of building permits by watershed is displayed in Table 4-2 and Figure 4-2.

Table 4-2: Number of Building Permits by Watershed for FY2015.

Watershed	Number of Permits
Upper Western Shore	
Deer Creek	0
Prettyboy Reservoir	1
Loch Raven Reservoir	202
Lower Gunpowder Falls	56
Little Gunpowder Falls	13
Bird River	257
Gunpowder River	14
Middle River	85
Upper Western Shore Totals	628
Patapsco/Back River	
Liberty Reservoir	14
Patapsco River	191
Gwynns Falls	294
Jones Falls	233
Back River	152
Baltimore Harbor	77
Patapsco/Back River Totals	961
County Totals	1,589

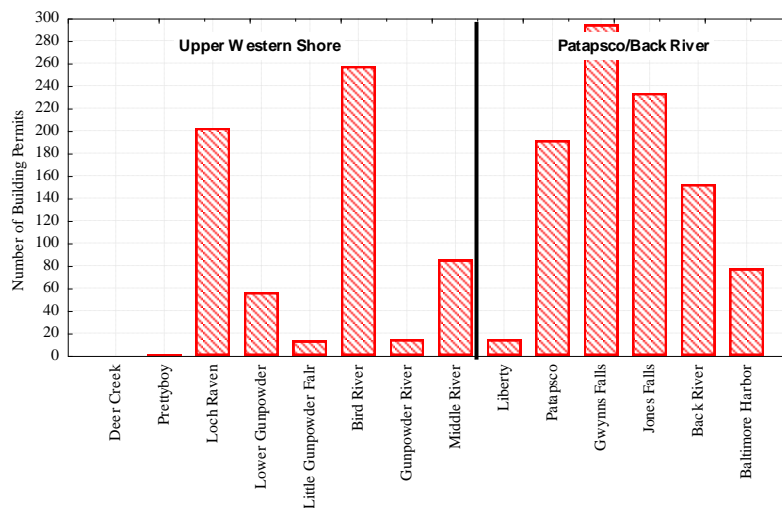


Figure 4-2: Number of building permits issued by watershed in FY2015.

Displayed in Table 4-3 and Figure 4-3 are the trends in building and grading permits, as well as acres of disturbance for a fourteen-year period. The data for the number of building permits was reevaluated in 2010 based on a new data source. The entire table was updated in the 2010 report using this data source. The data used for the building permits is now extracted from the data layer called “Landuse Permits”. Residential permits include single family and multi-family

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dwellings. The Other Building permits column includes all other building permits. Building permits were selected if they had an occupancy date in that year and were issued for new construction.

Table 4-3: Number of Grading and Building Permits by Year

Year	Grading Permits	Acres of Disturbance	Residential Building Permits	Other Building Permits	Total Building Permits
1999	364	1,115*	2,480	107	2,587
2000	256	1,081	2,148	143	2,291
2001	232	1,209	1,636	105	1,741
2002	216	1,093	1,548	105	1,653
2003	258	916	1,339	39	1,378
2004	249	905	1,159	103	1,262
2005	217	1,083	1,231	113	1,344
2006	230	1,147	1,349	101	1,450
2007	212	698	983	121	1,104
2008	217	670	743	105	848
2009	185	430	491	201	692
2010	188	447	500	376	876
2011 – FY12	319	647	831	803	1,634
FY13	112	339	679	474	1,153
FY14	150	523	794	330	1,124
FY15	162	434	903	686	1,589

*Excludes single permit for 6,060 acres of disturbance associated with 1999 Colonial Pipeline maintenance project.

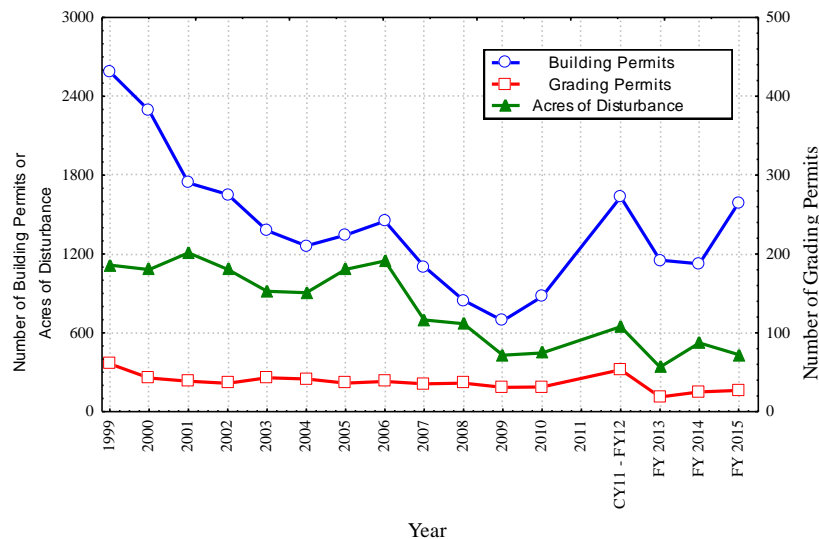


Figure 4-3: Approved Grading and Building Permits for the Period 1998 – 2013.

Construction activities in Baltimore County had been decreasing in number throughout the past fourteen years. This year the acres of disturbance is up from last year. Development has been purposefully directed towards existing urban areas within the County's Urban Rural Demarcation Line (URDL). These areas are also classified as the County's priority funding area and currently provide infrastructure and services such as: sewer, water, schools and an existing transportation network.

4.3.2 *Inspections, Complaints and Enforcement*

After construction begins, an inspector inspects the site an average of once every two weeks during the active constructive phase. Table 4-4 displays the number of inspections by type for Fiscal years 2012 through 2014. The data are broken down into two categories, inspections and enforcement actions.

In fiscal 2015, 1,221 enforcement actions were logged (Table 4-4, last column), and 5,457 inspections were logged (Table 4-4, seventh column).

Table 4-4: Sediment Control Inspection and Enforcement Data for FY12-FY15.

Year	Inspections						Enforcement		
	Prelim.	Pre Constr.	S.C. Inspt.	Final Inspt.	Complaint	Total Inspt.	Correct. Notice	Stop Work Order	Totals Enforce
FY2012	1,623	155	6,868	139	265	9,050	616	113	729
FY2013	1,633	118	4,386	16	2	6,155	321	59	380
FY2014	1,667	128	3,808	18	9	5,630	315	61	376
FY2015	1,592	110	3,613	12	13	5,457	1,118	103	1,221

Sediment controls are only seventy to ninety percent effective when they are properly installed and maintained. Therefore, a successful sediment control inspection and enforcement program is essential for achieving maximum effectiveness.

4.4 Program Analysis - Training Program

Two (2) Responsible Personnel Certification training sessions were held in FY2015 - February 25, and March 19, 2015. The first class totaled nineteen (19) people consisting of all Baltimore County Public School personnel. The second was offered to ten (10) Baltimore County Public Works employees. The training program is offered to construction site operators in Baltimore County on an as-needed basis. Baltimore County maintains an interest list on file and offers the certification class when enrollment requests justify the need. One hundred percent (100%) of the total class attendees in FY15 were County personnel.

4.5 MDE Delegation

The County is still in the process of reapplication for delegation. Application is due by October 1, 2015 and according to MDE the request for delegation will be acted upon by January 2016.